



Attorney Docket No. 1761.1001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Takayuki NORIMATSU

Application No.: 09/944,589

Group Art Unit: 3682

Filed: September 4, 2001

Examiner: William C. Joyce

For: WHEEL BEARING ASSEMBLY

REPLY BRIEF UNDER 37 CFR § 41.41

Commissioner for Patents
Board of Patent Appeals and Interferences
United States Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the Appellant's earlier filed Notice of Appeal on June 28, 2005, the Appellant appealed the Examiner's March 28, 2005 Office Action finally rejecting claims 1-12. Appellant's Appeal Brief was filed August 29, 2005. The Examiner's Answer was mailed November 21, 2005. Appellant's Reply Brief together with the requisite fees set forth in 37 CFR § 41.20 is submitted herewith.

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I. Response to Examiner's "Response to Argument"**A. Response to Examiner's "Response to Argument" with respect to the rejection of claims 1-12 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement**

In the Examiner's "Response to Argument," the Examiner inquires whether the encoder requires "more than one type of rubber to be mixed with the magnetic material to achieve the claimed results." Appellant respectfully submits that, as noted in several responses as well as the Appeal Brief, the first full paragraph of page 11 of the subject application explicitly discloses three examples of base materials (a heat resistant nitrile rubber, acrylic rubber, or fluorine containing rubber) and one example of magnetic material (ferrite) to be mixed with a base material.

Accordingly, Appellant respectfully maintains that since the subject application provides evidence of a working example, and discloses starting materials for the claimed encoder, details of the specific thermal endurance test, and test results, the subject application provides significant direction to one of ordinary skill in the art, and provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.

Additionally, the Examiner appears to acknowledge the truth and accuracy of item 3 of the Appellant's Rule 132 Declaration submitted March 18, 2004 (hereinafter the "Declaration"). More specifically, the Examiner appears to acknowledge that the "Knack of Selecting Magnetic Material" (hereinafter the "Handbook") describes that a bonded magnet is known to be obtainable by mixing a magnetic material with a bond, such as rubber, contained within the range of 2-15% wt%, and that the bonded magnet described in the Handbook is similar to the rubber magnet forming the magnetized encoder of the subject application.

But Appellant respectfully submits that the Examiner mischaracterizes the statement regarding the similarity between the bonded magnet disclosed in the Handbook and the rubber magnet forming the magnetized encoder of the subject application as being solely "because they incorporate non-magnetic material." Appellant respectfully submits that there is nothing in the Declaration that limits the similarity between the bonded magnet disclosed in the Handbook and the rubber magnet forming the magnetized encoder of the subject application to be solely "because they incorporate non-magnetic material."

Accordingly, Appellant respectfully maintains that the Examiner has not provided sufficient reasoning or evidence to cast doubt on the truth or the accuracy of the Declaration.

Thus, Appellant respectfully maintains that the Examiner erred in not providing sufficient evidence or reasoning to support a determination that the disclosure does not satisfy the enablement requirement, and that any necessary experimentation is undue. Further, Appellant respectfully maintains that the Examiner erred in not providing sufficient reasoning or evidence to cast doubt on the truth or the accuracy of the Declaration.

B. Response to Examiner's "Response to Argument" with respect to the alternative rejection of claims 1-12 under 35 U.S.C. §103(a) as being unpatentable over Alff (U.S. Patent No. 5,622,437) in view of Appellant's prior art admission (filed 3/18/04 – hereinafter the Declaration) based on the handbook entitled "Knack of Selecting Magnetic Material" (hereinafter the Handbook).

With respect to Appellant's argument that neither Hajzler (U.S. Patent 5,431,413 – hereinafter "Hajzler") nor Alff (U.S. Patent No. 5,622,437 – hereinafter "Alff") disclose an elastic member having a series of alternating magnetic poles, the Examiner asserts: "it is understood that an encoder used to detect a rotational movement with a magnetic material must incorporate an alternating pole of opposite polarities." (Emphasis added). Appellant respectfully disagrees.

For example, an encoder could include a rotating gear made of ferrous metal and a magnetic pick-up that has a permanent magnet and a sensing element. The gear, which could be mounted on a rotating shaft, could have teeth, and during rotation, the teeth could disturb the magnetic flux emitted by the permanent magnet, causing the flux field to expand and collapse. These changes in the field could be sensed by the sensing element, which could generate a corresponding digital or pulse signal output. As another example, an elastic member having magnetic material could be formed in a gear shape as described above.

Accordingly Appellant respectfully submits that the term "encoder" does not inherently meet the claim limitation, as asserted by the Examiner.

Therefore, Appellant respectfully maintains that the Examiner has failed to provide evidence that the individual elements exist in the prior art, and thus, the Examiner has not provided sufficient evidence to maintain a prima facie obviousness rejection of the claims.

Additionally, the Examiner states that “the Handbook clearly provides the motivation for making the encoder of Alff with the disclosed mixing ratios of the Handbook, motivation being to provide an encoder having high dimensional precision.”

Appellant respectfully submits that the Examiner's logic is flawed.

For if Alff or Hajzler had high dimensional precision, then one of ordinary skill in the art would not be motivated to look outside the references. Thus, the Examiner's logic necessarily assumes that the encoder of Alff and Hajzler do not have high dimensional precision. But Appellant respectfully submits that there is no basis in either Alff or Hajzler, to assert that the encoder either possesses or lacks high dimensional precision.

Accordingly, Appellant respectfully maintains that there is insufficient evidence of a motivation that existed in the prior art and which would have motivated one of ordinary skill in the art to make the combination in the manner set forth in the office action. Therefore, Appellant respectfully maintains that the Examiner has failed to provide evidence that the motivation to combine the references as suggested by the Examiner exists in the prior art or in the knowledge generally available to one of ordinary skill in the art, and thus, the Examiner has not provided sufficient evidence to maintain a prima facie obviousness rejection of the claims.

II. Conclusion:

Appellant respectfully maintains that the present invention has unexpected advantages in that the specific properties can be obtained for the first time by the combination of a circumferentially magnetized member with the specific mixing ratio of magnetic material and elastic material. Since Alff, Hajzler, and the Handbook (as well as Japanese Laid-open Patent Publication No. 6-281018) are silent about such properties, it is apparent that the claimed invention is not a mere aggregation of Alff, Hajzler, and the Handbook.

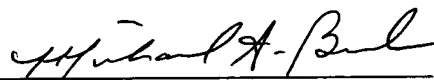
In view of the law and facts stated herein, the Appellant respectfully maintains that the reasoning and the references cited by the Examiner are insufficient to maintain either a non-enablement rejection or an obviousness rejection of the claims. Appellant respectfully urges that both the rejection of claims 1-12 under 35 U.S.C. §112, first paragraph and the alternative rejection of claims 1-12 under 35 U.S.C. §103(a) are improper. Reversal of the rejections in this appeal is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees required in connection with the filing of the Appeal Brief to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 23 JAN 2006

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